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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,975	10/22/2001	Haruhiko Mori	018976-209	8773

7590 04/13/2007  
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Alexandria, VA 22313-1404

EXAMINER
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SELF, SHELLEY M

ART UNIT	PAPER NUMBER
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3725

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

09/982,975

Applicant(s)

MORI, HARUHIKO

Examiner

Shelley Self

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 14-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

The remarks filed on January 26, 2007 has been considered but is ineffective to place the application in condition for allowance and an action on the merits follows.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 15, 17, 19, 20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue (4,414,028). With regard to claims 14 and 20, Inoue discloses a method for pressing a ceramic stacked layer structure (col. 3, lines 1-5) comprising the steps of: laterally holding sidewalls of a die at a predetermined position on a die base using a plurality of thrust mechanisms (fig. 1), wherein the die (2d) has a bottom plate and sidewalls forming a recess for receiving the ceramic layered structure (2a, 2b, c2c); and vertically pressing the ceramic layered structure in the recess between the bottom plate and a top die and while applying lateral force via the plurality of thrust mechanisms (Abstract; fig. 1) on the outer faces of the sidewalls in horizontal directions (6a, 6b) toward the recess (fig. 1) simultaneously.

With regard to claim 15, Inoue discloses the thrust mechanisms are attached to the die base.

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With regard to claim 17, Inoue discloses the bottom plate and sidewalls to be integral.

With regard to claim 19, Inoue discloses four thrust mechanisms (Abstract).

With regard to claim 22, Inoue discloses wherein the sidewalls of an entire perimeter of the die are laterally held by the thrust mechanisms (fig. 1) and the lateral force is applied to the entire perimeter of the die while vertically pressing the layered structure (Abstract).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (4,414,028) alone or in view of Mori et al. (5,370,760). Inoue does not disclose the bottom plate and sidewalls to be discrete components. It would have been obvious at the time of the invention to one having ordinary skill in the art to construct Inoue die bottom plate and sidewalls of discrete components, because constructing formerly integral structure in various elements involves only routine skill in the art. See *Nerwin v. Erlicnman*, 168 USPQ 177, 179.

Additionally Inoue does not disclose placing the stacked layer structure into the recess in the die and transporting the die.

Moreover, Mori teaches in a similar art, the method of pressing a ceramic "green sheets" stacked layer wherein a die is constructed of discrete bottom plate, sidewalls and top plate (14, 17; fig. 5) wherein the bottom plate has a step formed at it's periphery and the sidewalls are

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fitted to the step (fig. 5). Mori teaches this construction so as to efficiently place the ceramic material in the die and then move the die to the die base as to facilitate efficiently pressing of the ceramic material. Because the references are from a similar art and deal with a similar problem, i.e. pressing a ceramic stacked layer it would have been obvious at the time of the invention to the skilled artisan to construct Inoue's integral die of discrete components as taught by Mori to transport the die to the die base and for efficient compressing of the stacked layer.

### ***Response to Arguments***

Applicant's arguments filed January 26, 2007 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


Due to the new ground(s) of rejection noted above this Office Action is made non-Final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is 571-272-4524. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**SHELLEY M. SELF**  
**PRIMARY EXAMINER**  
April 10, 2007